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(21) International Application Number: PCT/FI99/00366 (22) International Filing Date: 3 May 1999 (03.05.99) (30) Priority Data: 980982 4 May 1998 (04.05.98) FI (71) Applicant (for all designated States except US): NOKIA NETWORKS OY [FI/FI]; Keilalahdentie 4, FIN-02150 Espoo (FI). (72) Inventors; and (75) Inventors/Applicants (for US only): KÄRNÄ, Juha [FI/FI]; Tontunmäentie 31 A 1, FIN-02200 Espoo (FI). HOTTINEN, Ari [FI/FI]; Ristiniementie 4 O 30, FIN-02320 Espoo (FI). HELENIUS, Jyri [FI/FI]; Timpurinkuja 1 A 15, FIN-02600 Espoo (FI). (74) Agent: PATENTTITOIMISTO TEKNOPOLOIS KOLSTER OY; c/o Kolster Oy AB, Iso Roobertinkatu 23, P.O. Box 148, FIN-00121 Helsinki (FI).		(81) Designated States: AE, AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  Published <i>In English translation (filed in Finnish).          Without international search report and to be republished upon receipt of that report.</i>	

(54) Title: METHOD OF MEASURING SIGNAL TIMING, AND RADIO SYSTEM

## (57) Abstract

The invention relates to a method of measuring signal timing and a CDMA radio system implementing the method. Data on at least one code channel transmitted by a neighbour base station (104, 106) is conveyed to a terminal (100) via a serving base station (102). On the basis of these data, the terminal (100) determines at least the spreading code of each said code channel and an estimate of the symbol timing in respect of the timing of the serving base station (102). The terminal utilizes at least some of the code channels of the neighbour base station (104, 106) to measure the signal timing of the neighbour base station (104, 106). On the basis of the timing, e.g. the location of the terminal (100) is determined.

